

G1 R1 ext

one antibody is conjugated to one type of particle instrumentally or visually separable by fluorescence, color and size, with sizes of the particles ranging from  $0.01\mu\text{m}$  to  $6\mu\text{m}$ , each antibody of the 2 to 6 antibodies is conjugated to different particles, and the ratio between the number of particles and the number of cells ranges from  $0.5 : 1$  to  $20 : 1$  in the cell suspension.

- F G1
2. (Twice Amended) Method according to claim 1, wherein the said size of the particles ranges from about  $0.5\mu\text{m}$  to about  $4.5\mu\text{m}$ , the said ratio is  $5 : 1$  (number of particles/number of cells), the said incubation time is 30 minutes and the said incubation temperature is  $4^\circ\text{C}$ .
- S G1
10. (Twice Amended) Method according to claim 9, wherein target cell characteristics of biologically informative markers of diagnostic, prognostic and therapeutic value are registered.

Sub G1

13. (Twice Amended) Method according to claim 10, wherein the biologically informative markers are E-cadherin, EGFr, c-erbB2, IL-2 receptor, TNF receptor, EGP2, MUC1, MUC2 & 3, PSA, PSM, GA733.2, TAG72, 15-3 epitope, ovarian carcinoma CA- 125 epitope, Le<sup>y</sup>, CEA, 15-3 epitope, HMW 250000 melanoma antigen, gp 75/TRP-1, p95, MAG 1, MAG 2, MAG 3, TP 1 and TP 3 epitopes, Mel-14 epitope, Fas, FasL, p75, KAT-1, AMF, gp120, MUC 18, TA99, MDR, MRP, VEGFr, bFGF, CCR, CXCR, uPAR, uPA, PAI-1, TIMP1 & 2, MMP9, stromelysins, and cathepsin D and par-human epitope.

G1 X

17. (New) Method to detect and phenotype intact target cells in cell suspensions by using particles coated with antibodies directed against membrane-associated antigenic determinants/receptors expressed on the intact target cells, wherein 2 to 6 antibodies, each conjugated to a particle, wherein the particle is a fluorescent or dyed particle, are incubated under gentle rotation for about 5 minutes to about 2 hours with cell suspensions containing the intact target cells at  $0^\circ\text{C}$  to  $25^\circ\text{C}$ , followed by an enrichment procedure, and evaluation of the intact target cell rosettes microscopically and/or by suitable visualizing or imaging devices, wherein the cells are evaluated while in suspension, and remain intact, and wherein one antibody is conjugated to one type of particle instrumentally or visually separable by fluorescence, color and size, with sizes of the particles ranging from  $0.01\mu\text{m}$  to  $6\mu\text{m}$ , each antibody of the 2 to 6 antibodies is conjugated to different particles, and the ratio between the number of particles and the number of cells ranges from  $0.5 : 1$  to  $20 : 1$  in the cell suspension.